## **CLAIMS:**

1. An electroluminescent device comprising a layer containing a naphthalene compound represented by Formula (1),

wherein:

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each R<sup>1</sup> and R<sup>2</sup> represents an independently selected substituent provided that adjacent substituents may join to form a ring;

p and w independently are 0-3;

the amine nitrogens on the naphthalene nucleus are located on separate rings;

m and n independently are 0, 1 or 2; each Ar<sup>b</sup> represents an independently selected aromatic group; and each Ar<sup>a</sup> represents an independently selected phenylene,

biphenylene or naphthalene group;

provided that at least one R<sub>1</sub> or R<sub>2</sub> substituent of the naphthalene compound represented by Formula (1) is a sterically bulky substituent.

- 2. The device of claim 1 wherein, at least two substituents of the naphthalene compound represented by Formula (1) are independently selected sterically bulky substituents.
  - 3. The device of claim 1 wherein each Ar<sup>a</sup> of Formula (1) represents an independently selected naphthalene group.

- 4. The device of claim 1 wherein the sterically bulky substituent is a branched alkyl group.
- 5. The device of claim 1 wherein the sterically bulky substituent is an aryl group with a substituent alpha to the point of attachment to the naphthalene compound.
- 6. The device of claim 1 wherein the naphthalene compound has at least one substituent that has a Sterimol B<sub>1</sub> value of 1.8 angstroms or greater.
- 7. The device of claim 1 wherein the naphthalene compound
  has at least one substituent that has a Sterimol B<sub>1</sub> value of 2.0 angstroms or
  greater.
  - 8. The device of claim 1 wherein the naphthalene compound has at least two substituents that have Sterimol  $B_1$  values of 2.0 angstroms or greater.
- 15 9. The device of claim 1 wherein the naphthalene compound has at least one substituent that is represented by Formula (2a),

$$\mathbf{A} - \mathbf{C} \begin{pmatrix} \mathbf{s}^{\mathbf{a}} \\ (\mathbf{s}^{\mathbf{a}})_{\mathbf{h}} \end{pmatrix} \tag{2a}$$

A represents the point of attachment to Formula (1);

S<sup>1</sup> and each S<sup>a</sup> represent an independently selected substituent, provided substituents may combine to form a saturated ring; and h is 1 or 2.

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- 10. The device of claim 9 wherein S<sup>1</sup> and each S<sup>a</sup> independently represent methyl groups and h is 2.
- 11. The device of claim 1 wherein the naphthalene compound has at least one  $R^1$  or  $R^2$  group that is a *t*-butyl group.
- 5 12. The device of claim 1 wherein the naphthalene compound has at least one substituent that is represented by Formula (2b),

$$\mathbf{a} = \mathbf{s}^2$$

$$\mathbf{a} = \mathbf{s}^b$$

$$\mathbf{s}^b$$

$$\mathbf{s}^b$$

$$\mathbf{s}^b$$

$$\mathbf{s}^b$$

$$\mathbf{s}^b$$

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A represents the point of attachment to Formula (1);  $S^2$  and each  $S^b$  represent an independently selected substituent; and i is 0-4.

- 13. The device of claim 12 wherein the naphthalene compound has at least one substituent that is represented by Formula (2b) wherein S<sup>b</sup> represents a methyl group.
- 15 14. The device of claim 1 wherein the naphthalene compound has at least one R<sup>1</sup> or R<sup>2</sup> group that is a mesityl group.
  - 15. The device of claim 1 wherein the naphthalene compound is represented by Formula (3),

$$Ar^{b} - N$$

$$(R^{3})_{d}$$

$$(R^{1})_{p}$$

$$(R^{2})_{w}$$

$$(R^{5})_{f}$$

$$(R^{5})_{g}$$

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 $each \ R^1-R^6 \ represents \ an \ independently \ selected \ substituent$  provided that adjacent substituents may join to form a ring;

d, e, f, g, p and w independently are 0-3; and each Ar<sup>b</sup> represents an independently selected aromatic group.

- 16. The device of claim 15 wherein the naphthalene compound is represented by Formula (3), wherein, at least two d, e, f, g, p and w are 1 or greater and at least two of  $R^1 R^6$  represent an independently selected branched alkyl group.
- 17. The device of claim 15 wherein the naphthalene compound is represented by Formula (3), wherein, at least two d, e, f, g, p and w are 1 or greater and at least two of  $R^1 R^6$  represent an independently selected branched alkyl group.
- 18. The device of claim 15 wherein the naphthalene compound is represented by Formula (3), wherein, at least two d, e, f, g, p and w are 1 or greater and at least two of R<sup>1</sup> R<sup>6</sup> represent an independently selected aryl group with a substituent alpha to the point of attachment to the naphthalene compound.

- 19. The device of claim 15 wherein the naphthalene compound is represented by Formula (3), wherein at least two d, e, f, g, p and w are 1 or greater and at least two of  $R^1 R^6$  represent an independently selected substituent with a Sterimol  $B_1$  value of 2.0 angstroms or greater.
- 5 20. The device of claim 15 wherein the naphthalene compound is represented by Formula (3), wherein at least two d, e, f, g, p and w are 1 or greater and at least two of R<sup>1</sup> R<sup>6</sup> are further represented by Formula (2a) or (2b),

$$\mathbf{A} - \mathbf{C} \begin{pmatrix} \mathbf{S}^1 \\ (\mathbf{S}^a)_{\mathbf{h}} \end{pmatrix} \tag{2a}$$

$$\mathbf{a} = \mathbf{s}^{2}$$

$$\mathbf{a} = \mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

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A represents the point of attachment to Formula (1);

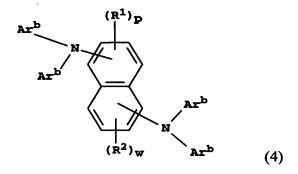
S<sup>1</sup> and each S<sup>a</sup> represent an independently selected substituent, provided substituents may combine to form a saturated ring;

h is 1 or 2.

wherein:

S<sup>2</sup> and each S<sup>b</sup> represent an independently selected substituent; and i is 0-4.

21. The device of claim 1 wherein the naphthalene compound is represented by Formula (4),



each R<sup>1</sup> and R<sup>2</sup> represents an independently selected substituent, provided that adjacent substituents may join to form a ring;

p and w independently are 0-3; and each Ar<sup>b</sup> represents an independently selected aromatic group.

- 22. The device of claim 21 wherein the naphthalene compound is represented by Formula (4), wherein, p and w are each 1 or greater and at least one of R<sup>1</sup> and at least one of R<sup>2</sup> represent an independently selected branched alkyl group.
- 23. The device of claim 21 wherein the naphthalene compound is represented by Formula (4), wherein, p and w are each 1 or greater and at least one of  $\mathbb{R}^1$  and at least one of  $\mathbb{R}^2$  represent an independently selected aryl group with a substituent alpha to the point of attachment to the naphthalene compound.

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24. The device of claim 21 wherein the naphthalene compound is represented by Formula (4), wherein p and w are each 1 or greater and at least one of  $\mathbb{R}^1$  and at least one of  $\mathbb{R}^2$  represent an independently selected substituent with a Sterimol  $\mathbb{B}_1$  value of 2.0 angstroms or greater.

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25. The device of claim 21 wherein the naphthalene compound is represented by Formula (4), wherein p and w are 1 or greater and at least one of  $R^1$  and at least one of  $R^2$  are further represented by Formula (2a) or (2b),



$$\mathbf{a} = \mathbf{s}^{2}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

$$\mathbf{s}^{\mathbf{b}}$$

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A represents the point of attachment to Formula (1);

S<sup>1</sup> and each S<sup>a</sup> represent an independently selected substituent, provided substituents may combine to form a saturated ring;

h is 1 or 2.

S<sup>2</sup> and each S<sup>b</sup> represent an independently selected substituent; and i is 0-4.

- 10 26. The device of claim 1 wherein the layer containing the compound of Formula (1) is a hole transport layer.
  - 27. The device of claim 1 wherein the layer containing the compound of Formula (1) is a luminescent layer.
- 28. The device of claim 1 comprising a triplet light emitting material.
  - 29. The device of claim 1 comprising a polymeric light emitting material.
  - 30. A display comprising the electroluminescent device of claim 1.

- 31. The device of claim 1 wherein white light is produced either directly or by using filters.
- 32. An area lighting device comprising the electroluminescent device of claim 1.
- 5 33. A process for emitting light comprising applying a potential across the device of claim 1.